

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/772,076
Source: IFWJ
Date Processed by STIC: 10/22/04

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/772,076

DATE: 10/22/2004

TIME: 13:08:25

Input Set : A:\18989-032US.txt

Output Set: N:\CRF4\10222004\J772076.raw

3 <110> APPLICANT: Bunn
 5 <120> TITLE OF INVENTION: Compositions and Methods of Treating Diabetes
 7 <130> FILE REFERENCE: 18989-032
 9 <140> CURRENT APPLICATION NUMBER: 10/772,076
 10 <141> CURRENT FILING DATE: 2004-02-03
 12 <150> PRIOR APPLICATION NUMBER: 60/444,784
 13 <151> PRIOR FILING DATE: 2003-02-03
 15 <160> NUMBER OF SEQ ID NOS: 11
 17 <170> SOFTWARE: PatentIn Ver. 2.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 1676
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Homo sapiens
 24 <400> SEQUENCE: 1
 25 agccttatgg attggattcg actgaccaaa agtgaaaagg atctaacggg attaaaaggc 60
 26 aggttaattt aagtaactga agaagaacct aagaaacaca acaaaaaaaga tgattgttgg 120
 27 atatgcataa gaggtttcgt ttataatgtc agcccttata tggagtatca tcctgggtgg 180
 28 gaagatgaac taatgagagc agcaggatca gatggtaactg aacttttga tcaggttc 240
 29 cttgggtca attatgaatc catgctgaaa gaatgcctgg ttggcagaat ggccattaaa 300
 30 cctgctgttc tgaaagacta tcgtgaggag gaaaagaaaag tcttaaatgg catgttccc 360
 31 aagagccaag tgacagatac acttgccaaa gaaggtccta gttatccaag ctatgattgg 420
 32 ttccaaacag actctttagt caccattgcc atataacta aacagaaggaa tatcaattta 480
 33 gactcaatta tagttgatca tcagaatgat tccttttagag cagaaacaat tattaaggat 540
 34 tggttataatc ttatacatat tgggctaagg catgggttc aggaagattt ttctgtgcgg 600
 35 gttgttgaga gtgtggaaa aatagagattt gttctacaaa aaaaagagaa tacttcttgg 660
 36 gactttcttg gccatccccct gaagaatcat aattcaactt ttccaaggaa agatacagg 720
 37 ttgtactaca gaaagtgcctt gttaaatttcc aaggaagatg ttactcatga tacgaggctt 780
 38 ttctgttga tgctgccacc aagcactcat cttcaagtgc ccattggca acatgtttac 840
 39 ctcaagctac ctattacagg tacagaaata gtaaaagccat atacacctgt atctgggtcc 900
 40 ttactcttag agttcaagga accagttctt cccacaata aatacatcta ctttttgata 960
 41 aaaatctatc ccactggact cttcacacca gagcttgatc gtcttcagat tggagatttt 1020
 42 gtttctgtaa gcagtctga gggcaattttt aaaatatcca agttccaaga attagaagat 1080
 43 ctcttttgtt tggcagctgg aacaggcttc acaccaatgg ttaaaatactt gaattatgct 1140
 44 ttgactgata taccctgtt caggaaagtg aagctgtatgt tcttcaataa aacagaagat 1200
 45 gatataattt ggagaagcca attggagaaa ttagcattt aagataaaaag actggatgtt 1260
 46 gaatttggcc tctcagcacc tatttctgaa tggaaatggca aacaggggaca tatttcacca 1320
 47 gctcttcttt ctgaattttt gaaaagaaaat ttggacaaat ccaaagttct cgtctgcatt 1380
 48 tggaccagg tgccattttac agaacaagga gtaaggtgc tgcattgtatctt caactttcc 1440
 49 aaaaatgaga tccatagttt tacagcataa tgaagagctg tcattgtcct ttattcaact 1500
 50 agtttatcta aatttgcgtat tgcttagggg tttttaaagag aacatttttg tacataacaa 1560
 51 aaggttaactt agaattccaggc cttcagtttc tttaatgaaa tcaaatttttc cttcagtaca 1620
 52 ggtaacttctt tggcttctt ttgtaccaca acttattttt ctactgtatat ttgacc 1676
 55 <210> SEQ ID NO: 2

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/772,076

DATE: 10/22/2004
TIME: 13:08:25

Input Set : A:\18989-032US.txt
Output Set: N:\CRF4\10222004\J772076.raw

56 <211> LENGTH: 487
 57 <212> TYPE: PRT
 58 <213> ORGANISM: Homo sapiens
 60 <400> SEQUENCE: 2
 61 Met Asp Trp Ile Arg Leu Thr Lys Ser Gly Lys Asp Leu Thr Gly Leu
 62 1 5 10 15
 64 Lys Gly Arg Leu Ile Glu Val Thr Glu Glu Glu Leu Lys Lys His Asn
 65 20 25 30
 67 Lys Lys Asp Asp Cys Trp Ile Cys Ile Arg Gly Phe Val Tyr Asn Val
 68 35 40 45
 70 Ser Pro Tyr Met Glu Tyr His Pro Gly Gly Glu Asp Glu Leu Met Arg
 71 50 55 60
 73 Ala Ala Gly Ser Asp Gly Thr Glu Leu Phe Asp Gln Val His Arg Trp
 74 65 70 75 80
 76 Val Asn Tyr Glu Ser Met Leu Lys Glu Cys Leu Val Gly Arg Met Ala
 77 85 90 95
 79 Ile Lys Pro Ala Val Leu Lys Asp Tyr Arg Glu Glu Glu Lys Lys Val
 80 100 105 110
 82 Leu Asn Gly Met Leu Pro Lys Ser Gln Val Thr Asp Thr Leu Ala Lys
 83 115 120 125
 85 Glu Gly Pro Ser Tyr Pro Ser Tyr Asp Trp Phe Gln Thr Asp Ser Leu
 86 130 135 140
 88 Val Thr Ile Ala Ile Tyr Thr Lys Gln Lys Asp Ile Asn Leu Asp Ser
 89 145 150 155 160
 91 Ile Ile Val Asp His Gln Asn Asp Ser Phe Arg Ala Glu Thr Ile Ile
 92 165 170 175
 94 Lys Asp Cys Leu Tyr Leu Ile His Ile Gly Leu Ser His Glu Val Gln
 95 180 185 190
 97 Glu Asp Phe Ser Val Arg Val Val Glu Ser Val Gly Lys Ile Glu Ile
 98 195 200 205
 100 Val Leu Gln Lys Lys Glu Asn Thr Ser Trp Asp Phe Leu Gly His Pro
 101 210 215 220
 103 Leu Lys Asn His Asn Ser Leu Ile Pro Arg Lys Asp Thr Gly Leu Tyr
 104 225 230 235 240
 106 Tyr Arg Lys Cys Gln Leu Ile Ser Lys Glu Asp Val Thr His Asp Thr
 107 245 250 255
 109 Arg Leu Phe Cys Leu Met Leu Pro Pro Ser Thr His Leu Gln Val Pro
 110 260 265 270
 112 Ile Gly Gln His Val Tyr Leu Lys Leu Pro Ile Thr Gly Thr Glu Ile
 113 275 280 285
 115 Val Lys Pro Tyr Thr Pro Val Ser Gly Ser Leu Leu Ser Glu Phe Lys
 116 290 295 300
 118 Glu Pro Val Leu Pro Asn Asn Lys Tyr Ile Tyr Phe Leu Ile Lys Ile
 119 305 310 315 320
 121 Tyr Pro Thr Gly Leu Phe Thr Pro Glu Leu Asp Arg Leu Gln Ile Gly
 122 325 330 335
 124 Asp Phe Val Ser Val Ser Ser Pro Glu Gly Asn Phe Lys Ile Ser Lys
 125 340 345 350
 127 Phe Gln Glu Leu Glu Asp Leu Phe Leu Ala Ala Gly Thr Gly Phe

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/772,076

DATE: 10/22/2004
TIME: 13:08:25

Input Set : A:\18989-032US.txt
Output Set: N:\CRF4\10222004\J772076.raw

128	355	360	365
130	Thr Pro Met Val Lys Ile Leu Asn Tyr Ala Leu Thr Asp Ile Pro Ser		
131	370	375	380
133	Leu Arg Lys Val Lys Leu Met Phe Phe Asn Lys Thr Glu Asp Asp Ile		
134	385	390	395
136	Ile Trp Arg Ser Gln Leu Glu Lys Leu Ala Phe Lys Asp Lys Arg Leu		400
137	405	410	415
139	Asp Val Glu Phe Val Leu Ser Ala Pro Ile Ser Glu Trp Asn Gly Lys		
140	420	425	430
142	Gln Gly His Ile Ser Pro Ala Leu Leu Ser Glu Phe Leu Lys Arg Asn		
143	435	440	445
145	Leu Asp Lys Ser Lys Val Leu Val Cys Ile Cys Gly Pro Val Pro Phe		
146	450	455	460
148	Thr Glu Gln Gly Val Arg Leu Leu His Asp Leu Asn Phe Ser Lys Asn		
149	465	470	475
151	Glu Ile His Ser Phe Thr Ala		480
152	485		
155	<210> SEQ ID NO: 3		
156	<211> LENGTH: 135		
157	<212> TYPE: PRT		
158	<213> ORGANISM: Homo sapiens		
160	<400> SEQUENCE: 3		
161	Met Asp Trp Ile Arg Leu Thr Lys Ser Gly Lys Asp Leu Thr Gly Leu		
162	1	5	10
164	Lys Gly Arg Leu Ile Glu Val Thr Glu Glu Glu Leu Lys Lys His Asn		15
165	20	25	30
167	Lys Lys Asp Asp Cys Trp Ile Cys Ile Arg Gly Phe Val Tyr Asn Val		
168	35	40	45
170	Ser Pro Tyr Met Glu Tyr His Pro Gly Gly Glu Asp Glu Leu Met Arg		
171	50	55	60
173	Ala Ala Gly Ser Asp Gly Thr Glu Leu Phe Asp Gln Val His Arg Trp		
174	65	70	75
176	Val Asn Tyr Glu Ser Met Leu Lys Glu Cys Leu Val Gly Arg Met Ala		80
177	85	90	95
179	Ile Lys Pro Ala Val Leu Lys Asp Tyr Arg Glu Glu Glu Lys Val		
180	100	105	110
182	Leu Asn Gly Met Leu Pro Lys Ser Gln Val Thr Asp Thr Leu Ala Lys		
183	115	120	125
185	Glu Gly Pro Ser Tyr Pro Ser		
186	130	135	
189	<210> SEQ ID NO: 4		
190	<211> LENGTH: 90		
191	<212> TYPE: PRT		
192	<213> ORGANISM: Homo sapiens		
194	<400> SEQUENCE: 4		
195	Tyr Asp Trp Phe Gln Thr Asp Ser Leu Val Thr Ile Ala Ile Tyr Thr		
196	1	5	10
198	Lys Gln Lys Asp Ile Asn Leu Asp Ser Ile Ile Val Asp His Gln Asn		15
199	20	25	30

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/772,076

DATE: 10/22/2004
TIME: 13:08:25

Input Set : A:\18989-032US.txt
Output Set: N:\CRF4\10222004\J772076.raw

201 Asp Ser Phe Arg Ala Glu Thr Ile Ile Lys Asp Cys Leu Tyr Leu Ile
202 35 40 45
204 His Ile Gly Leu Ser His Glu Val Gln Glu Asp Phe Ser Val Arg Val
205 50 55 60
207 Val Glu Ser Val Gly Lys Ile Glu Ile Val Leu Gln Lys Lys Glu Asn
208 65 70 75 80
210 Thr Ser Trp Asp Phe Leu Gly His Pro Leu
211 85 90
214 <210> SEQ ID NO: 5
215 <211> LENGTH: 262
216 <212> TYPE: PRT
217 <213> ORGANISM: Homo sapiens
219 <400> SEQUENCE: 5
220 Lys Asn His Asn Ser Leu Ile Pro Arg Lys Asp Thr Gly Leu Tyr Tyr
221 1 5 10 15
223 Arg Lys Cys Gln Leu Ile Ser Lys Glu Asp Val Thr His Asp Thr Arg
224 20 25 30
226 Leu Phe Cys Leu Met Leu Pro Pro Ser Thr His Leu Gln Val Pro Ile
227 35 40 45
229 Gly Gln His Val Tyr Leu Lys Leu Pro Ile Thr Gly Thr Glu Ile Val
230 50 55 60
232 Lys Pro Tyr Thr Pro Val Ser Gly Ser Leu Leu Ser Glu Phe Lys Glu
233 65 70 75 80
235 Pro Val Leu Pro Asn Asn Lys Tyr Ile Tyr Phe Leu Ile Lys Ile Tyr
236 85 90 95
238 Pro Thr Gly Leu Phe Thr Pro Glu Leu Asp Arg Leu Gln Ile Gly Asp
239 100 105 110
241 Phe Val Ser Val Ser Ser Pro Glu Gly Asn Phe Lys Ile Ser Lys Phe
242 115 120 125
244 Gln Glu Leu Glu Asp Leu Phe Leu Leu Ala Ala Gly Thr Gly Phe Thr
245 130 135 140
247 Pro Met Val Lys Ile Leu Asn Tyr Ala Leu Thr Asp Ile Pro Ser Leu
248 145 150 155 160
250 Arg Lys Val Lys Leu Met Phe Phe Asn Lys Thr Glu Asp Asp Ile Ile
251 165 170 175
253 Trp Arg Ser Gln Leu Glu Lys Leu Ala Phe Lys Asp Lys Arg Leu Asp
254 180 185 190
256 Val Glu Phe Val Leu Ser Ala Pro Ile Ser Glu Trp Asn Gly Lys Gln
257 195 200 205
259 Gly His Ile Ser Pro Ala Leu Leu Ser Glu Phe Leu Lys Arg Asn Leu
260 210 215 220
262 Asp Lys Ser Lys Val Leu Val Cys Ile Cys Gly Pro Val Pro Phe Thr
263 225 230 235 240
265 Glu Gln Gly Val Arg Leu Leu His Asp Leu Asn Phe Ser Lys Asn Glu
266 245 250 255
268 Ile His Ser Phe Thr Ala
269 260
272 <210> SEQ ID NO: 6
273 <211> LENGTH: 494

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/772,076

DATE: 10/22/2004
TIME: 13:08:25

Input Set : A:\18989-032US.txt
Output Set: N:\CRF4\10222004\J772076.raw

```

274 <212> TYPE: PRT
275 <213> ORGANISM: Mus musculus
277 <400> SEQUENCE: 6
278 Met Asp Trp Ile Arg Leu Thr Lys Ser Gly Lys Asp Leu Thr Gly Leu
279      1           5           10          15
281 Lys Gly Gly Leu Ile Glu Val Thr Glu Glu Leu Lys Lys His Asn
282      20          25          30
284 Lys Lys Glu Asp Cys Trp Ile Cys Ile Arg Gly Phe Val Tyr Asn Val
285      35          40          45
287 Ser Pro Tyr Met Glu Tyr His Pro Gly Gly Glu Asp Glu Leu Met Arg
288      50          55          60
290 Ala Ala Gly Ala Asp Gly Thr Asp Leu Phe Asn Glu Val His Arg Trp
291      65          70          75          80
293 Val Asn Tyr Glu Ser Met Leu Lys Glu Cys Leu Val Gly Arg Met Ala
294      85          90          95
296 Val Lys Pro Ala Val Pro Lys Asp Cys His Glu Gly Lys Arg Val Leu
297      100         105         110
299 Asn Gly Met Leu Pro Lys Ser Gln Met Ser Asp Thr Leu Pro Arg Asp
300      115         120         125
302 Val Thr Asp Thr Leu Pro Arg Glu Gly Leu Ser Ser Pro Ser Tyr Asp
303      130         135         140
305 Trp Phe Gln Thr Glu Ser Ser Val Thr Ile Val Val Tyr Thr Lys Gln
306      145         150         155         160
308 Lys Asn Ile Ser Leu Asp Ser Val Ile Val Asp Leu Gln Asp Asp Ser
309      165         170         175
311 Leu Arg Ala Glu Ala Val Ile Lys Asp His Ser Tyr Leu Val His Val
312      180         185         190
314 Gly Leu Ser His Glu Val Gln Glu Asn Phe Ser Val Arg Val Ile Glu
315      195         200         205
317 Asn Val Gly Lys Ile Glu Ile Val Leu Gln Lys Lys Glu Ser Val Ser
318      210         215         220
320 Trp Gln Cys Leu Gly Asp His Leu Glu Lys His Asp Ser Phe Ile Pro
321      225         230         235         240
323 Lys Lys Asp Thr Gly Leu Tyr Tyr Arg Arg Cys Gln Leu Ile Ser Lys
324      245         250         255
326 Glu Asp Val Thr His Asp Thr Arg Leu Leu Cys Leu Met Leu Pro Pro
327      260         265         270
329 Ser Thr His Leu Gln Val Pro Val Gly Gln His Val Tyr Leu Lys Leu
330      275         280         285
332 Ser Val Thr Gly Ala Glu Ile Val Lys Pro Tyr Thr Pro Val Ser Asp
333      290         295         300
335 Ser Leu Leu Ser Asp Phe Lys Glu Pro Val Leu Ser Pro Asn Lys Tyr
336      305         310         315         320
338 Ile Tyr Phe Leu Ile Lys Ile Tyr Pro Ala Gly Leu Phe Thr Pro Glu
339      325         330         335
341 Leu Asp Arg Leu Gln Ile Gly Asp Phe Ile Ser Val Ser Gly Pro Glu
342      340         345         350
344 Gly Asn Phe Lys Val Ser Lys Leu Gln Glu Val Glu Asp Leu Phe Leu
345      355         360         365

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/22/2004
PATENT APPLICATION: US/10/772,076 TIME: 13:08:26

Input Set : A:\18989-032US.txt
Output Set: N:\CRF4\10222004\J772076.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; Xaa Pos. 4,13,19,35,68,72,75,76,97,102,105,106,108,109,111,122,123
Seq#:8; Xaa Pos. 124,125,126,127,128,129,135,136,139,141,150,152,156,157
Seq#:8; Xaa Pos. 163,165,169,173,175,178,182,183,187,188,191,193,202,208
Seq#:8; Xaa Pos. 210,219,223,224,227,228,231,232,234,235,237,239,242,251
Seq#:8; Xaa Pos. 267,281,290,291,294,305,310,317,318,331,347,351,358,361
Seq#:8; Xaa Pos. 364,381,382,385,388,389,390,391,412,419,420,421,424,425
Seq#:8; Xaa Pos. 428,434,435,444,446,454,456,457,458,459,461,462,463,464
Seq#:8; Xaa Pos. 470,474,475,477,487,488,492
Seq#:9; Xaa Pos. 4,13,19,35,68,72,75,76,97,102,105,106,108,109,111,122,123
Seq#:9; Xaa Pos. 124,125,126,127,128,129,135
Seq#:10; Xaa Pos. 1,4,6,15,17,21,22,28,30,34,38,40,43,47,48,52,53,56,58,67
Seq#:10; Xaa Pos. 73,75,84,88,89,92,93,96,97,99,100,102,104
Seq#:11; Xaa Pos. 2,11,27,41,50,51,54,65,70,77,78,91,107,111,118,121,124
Seq#:11; Xaa Pos. 141,142,145,148,149,150,151,172,179,180,181,184,185,188
Seq#:11; Xaa Pos. 194,195,204,206,214,216,217,218,219,221,222,223,224,230
Seq#:11; Xaa Pos. 234,235,237,247,248,252

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/772,076

DATE: 10/22/2004

TIME: 13:08:26

Input Set : A:\18989-032US.txt

Output Set: N:\CRF4\10222004\J772076.raw

L:487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
M:341 Repeated in SeqNo=8
L:596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
M:341 Repeated in SeqNo=9
L:639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
M:341 Repeated in SeqNo=10
L:676 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
M:341 Repeated in SeqNo=11